Unicenter

TCPaccess FTP Server Getting Started

Version 6.0



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Chapter

Introduction

Welcome to high performance file transfers! This release of Unicenter TCPaccess FTP Server is an innovation in providing you with a performance product that runs irrespective of which IP protocol stack you have chosen. Computer Associates values the unique qualities of Unicenter TCPaccess FTP Server, and its uncoupling from its traditional Unicenter TCPaccess Communications Server base meaning Computer Associates can accelerate its development with frequent new releases, in response to your requirements, independent of transport layer enhancements.

Unicenter TCPaccess FTP Server allows management of FTP activity that includes scheduling and alerting, enabling you to take control of file transfers in your organization. When coupled with Computer Associates Unicenter NetMaster File Transfer Management, you have total control over transfers that are initiated or terminated on the mainframe. Your organization is dependent on reliable and efficient file transfers. That's why Unicenter TCPaccess FTP Server is your preferred choice for a reliable and efficient FTP server.

FTP Server Features

Features include:

- Use of UNIX System Services (USS) sockets so that the client can now be invoked in USS environment
- Exit points to Unicenter NetMaster File Transfer
 Management for superior management of file transfer
 activity

Related Documentation

With Unicenter TCPaccess FTP Server, Computer Associates distributes CA Common Services for z/OS and OS/390 (formerly known as Unicenter TNG Framework for OS/390 or CA90s) tape and the following guides:

Name	Contents
CA Common Services for z/OS and OS/390	Operating instructions for the CA Common Services for z/OS and OS/390.
Administrator Guide	
CA Common Services for z/OS and OS/390	Installation procedures and installation JCL for CA Common Services for z/OS and OS/390.
Getting Started	
CA Message Guide	CA Common Services for z/OS and OS/390.

Unicenter TCPaccess FTP Server Documentation

With Unicenter TCPaccess Telnet Server, Computer Associates distributes the following guides:

- Release Summary
- Getting Started
- Administrator
- User

In addition, you will receive the *Unicenter TCPaccess Prefixed* Messages and Unicenter TCPaccess Unprefixed Messages guides.

CA Services: Enabling Solutions Through Experience

When it comes to getting on the information fast track, CA Services can recommend and install a full suite of portal and knowledge management solutions to keep your business moving. And our associates offer the proprietary know-how on custom-fitting your enterprise for solutions ranging from life cycle management, data warehousing, and next-level business intelligence. Our experts will leave you with the technology and knowledge tools to fully collect, exploit, and leverage your data resources and applications.

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For More Information

After walking through this *Getting Started* guide, you can refer to the numerous resources available to you for additional information. Your product CD contains useful instructional documents that showcase your software and provide detailed explanations about the product's comprehensive, feature-rich components. In addition, the online help system at eSupport.ca.com offers procedural information and answers to any questions you may encounter.

Chapter

CA Common Services for z/OS and OS/390

To help you quickly understand all that CA Common Services for z/OS and OS/390 offers, this section provides a brief description of the common services that can be used by the Unicenter TCPaccess FTP Server.

CAIRIM

CAIRIM, CAI Resource Initialization Manager, is the common driver for a collection of dynamic initialization routines that eliminate the need for user SVCs, SMF exits, subsystems, and other installation requirements commonly encountered when installing systems software. These routines are grouped under the Computer Associates z/OS andOS/390 dynamic service code, S910. Some of the features of CAIRIM include:

- Obtaining SMF data
- Verification of proper software installation
- Installation of z/OS and OS/390 interfaces
- Automatic startup of CA and other vendor products
- Proper timing and order of initialization

No other services are required to operate properly.

Note: CAIRIM is mandatory for Unicenter TCPaccess FTP Server. It must be installed and started with Unicenter TCPaccess FTP Server within 30 minutes of IPL time. CAIRIM is part of the CA Common Services for z/OS and OS/390.

CA LMP

The CA License Management Program (LMP) provides a standardized and automated approach to the tracking of licensed software. It uses common realtime enforcement software to validate the user's configuration. CA LMP reports on license, usage, and financial activities of Unicenter TCPaccess FTP Server. The routines that accomplish this are integrated into the Computer Associates z/OS and OS/390 dynamic service code, S910 (the CAIRIM service).

Some of the features of CA LMP include:

- Common key data set can be shared among many CPUs
- Check digits are used to detect errors in transcribing key information
- Execution keys can be entered without affecting any CA software solution already running
- No special maintenance requirements

Requirements

Unicenter TCPaccess FTP Server requires CA Common Services for z/OS and OS/390 at genlevel 9901 or above, and OS2.10

Using CA LMP

Unicenter TCPaccess FTP Server requires CA LMP (License Management Program), one of the Common Services, to initialize correctly. CA LMP also provides a standardized and automated approach to the tracking of licensed software.

CA LMP is provided as an integral part of CAIRIM (Resource Initialization Manager), another one of the Common Services. If CAIRIM has not already been installed on your system, you must do so now. Once CAIRIM has been installed or maintained at Service Level C1/9901 or higher, CA LMP support is available for all CA LMP—supported CA software solutions. See the *CA Common Services for z/OS and OS/390 Getting Started* guide for detailed instructions on installing CAIRIM.

Examine the CA LMP Key Certificate you received with your Unicenter TCPaccess FTP Server installation or maintenance tape.

The certificate contains the following information:

Fields	Descriptions
Product Name	The trademarked or registered name of the CA software solution licensed for the designated site and CPUs.
Product Code	A two—character code that corresponds to Unicenter TCPaccess FTP Server.
Supplement	The reference number of your license for Unicenter TCPaccess FTP Server, in the format <i>nnnnnn</i> – <i>nnn</i> . This format differs slightly inside and outside North America, and in some cases may not be provided at all.
CPU ID	The code that identifies the specific CPU for which installation of Unicenter TCPaccess FTP Server is valid.

Fields	Descriptions
Execution Key	An encrypted code required by CA LMP for Unicenter TCPaccess FTP Server initialization. During installation, it is referred to as the LMP Code.
Expiration Date	The date (ddmmmyy as in 01AUG00) your license for Unicenter TCPaccess FTP Server expires.
Technical Contact	The name of the technical contact at your site responsible for the installation and maintenance of Unicenter TCPaccess FTP Server. This is the person to whom CA addresses all CA LMP correspondence.
MIS Director	The name of the Director of MIS, or the person who performs that function at your site. If the title but not the individual's name is indicated on the Certificate, you should supply the actual name when correcting and verifying the Certificate.
CPU Location	The address of the building where the CPU is installed.

The CA LMP execution key, provided on the Key Certificate, must be added to the CAIRIM parameters to ensure proper initialization of Unicenter TCPaccess FTP Server. To define a CA LMP execution key to the CAIRIM parameters, modify member KEYS in the OPTLIB data set.

The parameter structure for member KEYS is as follows:

PROD(pp) DATE(ddmmmyy) CPU(tttt-mmmm/ssssss)
LMPCODE(kkkkkkkkkkkkkkkkk)

Where:

pp—Required. The two-character product code. For any given CA LMP software solution, this code agrees with the product code already in use by the CAIRIM initialization parameters for earlier genlevels of that software solution.

The two-character product code for Unicenter TCPaccess FTP Server is: **2F**

ddmmmyy – The CA LMP licensing agreement expiration date.

tttt-mmmm – Required. The CPU type and model (for example: 3090 – 600) on which the CA LMP software solution is to run. If the CPU type and/or model require less than four characters, blank spaces are inserted for the unused characters.

ssssss – Required. The serial number of the CPU on which the CA LMP software solution is to run.

kkkkkkkkkkkkk – Required. The execution key needed to run the CA LMP software solution. This CA LMP execution key is provided on the Key Certificate shipped with each CA LMP software solution.

The following is an example of a control card for the CA LMP execution software parameter. Although this example uses the Unicenter TCPaccess FTP Server two-character product code, the CA LMP execution key value is invalid and is provided as an example only!

PROD(VP) DATE(01AUG00) CPU(3090— — -600 /370623) LMPCODE(52H2K06130Z7RZD6)

For a full description of the procedure for defining the CA LMP execution key to the CAIRIM parameters, see the *CA Common Services for z/OS and OS/390 Getting Started* guide.

Chapter

System Requirements

This section gives an overview of the requirements necessary to install Unicenter TCPaccess FTP Server using SMP/E.

It contains the following sections:

- **Installation Materials**
- <u>Installation Prerequisites</u>
- Updating the Linked List and Procedure Libraries
- Authorizing the Client for Execution in TSO

For detailed information about these installation procedures, refer to:

- The SMP/E installation of the product as outlined in this guide
- The security modifications outlined in the TCPaccess FTP Server Administrator Guide

Installation Materials

Before beginning the installation procedure, make sure that you have the following Unicenter TCPaccess installation materials:

- The installation tape-the volume serial number is specified on the PML (product maintenance letter) received with the installation package
- The CA Common Services for z/OS and OS/390 tape and documentation
- The documentation list described in the chapter "Introduction"

Installation Prerequisites

z/OS and OS/390 / ESA Release Level

Unicenter TCPaccess FTP Server requires an IBM supported release of OS/390 or z/OS. Contact Customer Support to verify that your system is at the correct supported level.

MVS/SP and MVS/ESA releases are not supported.

PDSE/SMS Requirements

Because Unicenter TCPaccess Telnet Server requires PDSE libraries, the SMPLTS data set in ALLOCSMP is defined as a PDSE. This is not a requirement for the Unicenter TCPaccess FTP Server. If you want to change SMPLTS to a PDS replace STORCLAS and DSNTYPE with UNIT= and VOL=SER= parameters.

Note:

- Support for non-SMS PDSEs is provided in DFSMS/MVS 1.4 and 1.5 with the appropriate maintenance applied. It is in the base of DFSMS 2.10. If you want to use non-SMS PDSEs replace STORCLAS with the UNIT= and VOL=SER= parameters.
- Some maintenance levels of data set utilities such as PDSMAN do not support PDSEs. If you are using such a product, be sure that it supports PDSEs or use the standard IBM IEBCOPY utility.

Linked List Data Sets

We recommend the LINK and FTPLINK data sets be link listed to avoid having to include STEPLIBs in TSO procedures and batch jobs.

If TCPaccess is used with UNIX System Services the PFSLOAD library must be either in the linklist or included in the STEPLIB in the OMVS cataloged procedure.

Note: the LOAD library must **never** be included in the linklist.

APF Authorizations

The following libraries must be APF authorized:

hlq.LOAD Unicenter TCPaccess FTP Server support

module

hlq.FTPLOAD Unicenter TCPaccess FTP Server modules for

NetMaster interface

hlg.FTPLINK Unicenter TCPaccess FTP Server client

command for FTP NetMaster interface

Another APF authorized library that must be available through linklist or STEPLIB is CEE.SCEERUN.

The Unicenter TCPaccess FTP Server load data set requires APF authorization. In order to set authorization for this common load data set, modify the IEAAPF*xx* member of the SYS1.PARMLIB data set.

Language Environment Requirement

IBM's Language Environment link-time library, CEE.SCEELKED, is a required SMP/E data set used by the CALLLIB facility.

Important! Unicenter TCPaccess FTP Server will not install properly without this library.

TCP/IP Stacks

Unicenter TCPaccess FTP Server supports the following TCP/IP stacks:

- IDM CS Version 2.5 or later
- TCPaccess FTP Server Version 6.0 or later

TSO/E

New users must verify that the IBM program product TSO/E is installed. Unicenter TCPaccess FTP Server configuration files are parsed using TSO/E parsing routines and S0C4 ABENDs can result if these routines are not available.

Modifying SYS1.PARMLIB(PROGxx)

If you do not have a procedure in place for modifying PARMLIB members, then use the following steps to update the SYS1.PARMLIB member PROGxx:

- 1. Verify the target name and volume serial of these data sets before proceeding.
- 2. If you have a procedure in place for modifying PARMLIB members, then follow that procedure; if you do not have a procedure in place, then proceed with Step 3.
- 3. Create a backup member by renaming the current PROGxx member and giving it a backup suffix. Copy the renamed member and give it the current suffix. This provides you with a backup member in case an error is made during the editing process.
- 4. Edit the APF authorization member PROGxx in SYS1.PARMLIB (where xx is the suffix of your member).
- 5. You must perform an IPL for the changes to take effect.

Note: If you dynamically authorize APF data sets, then you must still change the PROG*xx* member, or authorization is lost at the next IPL.

If you are not familiar with changing the PROGxx member in SYS1.PARMLIB, then refer to IBM's MVS Initialization and Tuning Guide.

WARNING! Whenever you make changes to any SYS1.PARMLIB member, be sure you can perform an IPL of your system using an alternate IPL volume or an alternate SYS1.PARMLIB member. Typographical errors can cause catastrophic errors during system initialization, leaving your z/OS and OS/390 system in an unusable state.

Updating the Linked List and Procedure Libraries

To execute the FTP client from batch or TSO, the load data set must be available to batch jobs and TSO users for execution.

If you decide to place the load data set in the link list, then the load data set must be cataloged in your master catalog. Therefore, the high-level qualifier of the load data set name must not be defined as an alias in your master catalog.

You can make the FTP client available by modifying one or more of the following:

- SYS1.PARMLIB
- Batch jobs
- TSO procedures
- SHELL scripts

Modifying SYS1.PARMLIB(LNKLSTxx)

The most reliable way to ensure availability of the client program in TSO or batch is to make the load data set available for execution globally.

Caution: Before proceeding with this method, make sure you are familiar with any policies your site may have regarding use of this data set.

Editing the LNKLSTxx Member

If you do not have a procedure in place for modifying PARMLIB members, then use the following steps to update the SYS1.PARMLIB member LNKLSTxx:

- 1. Create a backup member by renaming the current LNKLSTxx member and giving it a backup suffix. Copy the renamed member and give it the current suffix. This provides you with a backup member in case an error is made during the editing process.
- 2. Edit the LNKLSTxx (where xx is your local suffix) member in SYS1.PARMLIB.

For example, if your HLQ is T051 V600 for the FTP LINK data set, then add the following line to LINKLST*xx*:

T0J1.V600.FTPLINK

If you are not familiar with changing the LNKLSTxx member in SYS1.PARMLIB, then seek assistance from someone who is familiar with the process or consult IBM's MVS Initialization and Tuning Guide.

3. Perform the IPL for the changes to take effect. If you do not plan to perform an IPL right away, you can change STEPLIB or JOBLIB DD statements to make the programs available for execution until the next time the IPL is done.

WARNING! Whenever you make changes to any SYS1.PARMLIB member, be sure you can perform an IPL of your system using an alternate IPL volume or an alternate SYS1.PARMLIB member. Typographical errors can cause catastrophic errors during system initialization, leaving your z/OS andOS/390 system in an unusable state.

Testing the Client

If you have already modified LNKLSTxx to add the load library data set from a previous release, then do not replace that entry with the new load library data set until you are satisfied with the testing of the new release and are ready for migration. During testing, use JOBLIB or STEPLIB DD statements in TSO procedures, batch jobs, and the Unicenter TCPaccess FTP Server job to reference the load library data set for the new release.

Modifying Batch Jobs and TSO Procedures

You can make the FTP client program available for execution by modifying the batch jobs or TSO procedures that use them. To do so, add STEPLIB or JOBLIB DD statements for the load library data set to each batch job or TSO procedure that needs to execute them.

Modifying SHELL Scripts for Execution Under OMVS

You can make the FTP client program available for execution by performing the following steps. In this example, assume that the load library data set containing the client program is T051.V100.LOAD and that the directory /usr/local/bin is in the path for OMVS users:

1. Go to the /usr/local/bin directory:

cd /usr/local/bin

2. Create an entry point for the program:

touch T051C

Make the program executable:

chmod 555 T051C

4. Set the sticky bit so that the program can be found in the load library:

chmod +t T051C

Create and edit a new shell script file:

oedit ftp3

6. Enter the following command data in the script file:

_BPX_SHAREAS=YES STEPLIB=dsnpref.LINK /usr/local/bin/T051C

Note: Throughout this manual, the variable, *dsnpref*, represents the high—level qualifier used during your installation of Unicenter TCPaccess FTP Server.

- 7. Press F3 to save and exit the file.
- 8. Make the command file executable:

chmod 555 ftp3

Authorizing the Client for Execution in TSO

The FTP client command T051C may or may not be run as authorized programs or commands.

When run as authorized, it extracts encrypted passwords, groups, and user IDs. The extracted information is used to sign on to the FTP server address space on the local host.

The authorized version significantly reduces the number of times a user is prompted for a user ID and password. Neither plain text passwords nor their associated user IDs are sent across the TCP/IP network when the automatic signon feature of the authorized client is used.

The automatic signon feature provides the additional benefit of not having to leave a user ID and password in plain text in the batch input to the client stored on DASD.

To use this feature, complete the following steps in TSO.

- 1. Add the command module name and its alias to the AUTHCMD, AUTHPGM, and AUTHTSF sections of member IKJTSOxx.
- 2. Follow your installation's procedures for updating SYS1.PARMLIB members as shown in the following example.

```
AUTHCMD NAMES (
   T051C
   FTP
AUTHPGM NAMES (
   T051C
   FTP
AUTHTSF NAMES(
   T051C
   FTP
```

Chapter

Installation

This chapter provides information for system administrators and installation managers who are responsible for installing and continuing support of the Unicenter TCPaccess FTP Server product.

This chapter discusses the following topics:

- Sample JCL to Unload the Tape
- **Installation Job Streams**
- Installation Steps for Unicenter TCPaccess FTP Server
- Unicenter TCPaccess FTP Server USERMOD
- Starting Unicenter TCPaccess FTP Server

Sample JCL to Unload the Tape

Important! In order to install Unicenter TCPaccess FTP Server, you must have READ access to the data sets on the installation tape. A list of these data sets is provided in the appendix "Installation Data Sets."

Copy and execute the JCL below to unload the control file from which you will be able to install and customize Unicenter TCPaccess FTP Server. This control file, INSTLJCL, is on your Unicenter TCPaccess FTP Server base tape.

```
//UNLDTCP JOB
//*
//UNLOAD EXEC PGM=IEBCOPY
//INDD DD DISP=SHR,DSN=INSTLJCL,VOL=SER=NMD600,
// LABEL=(1,SL,EXPDT=98000),UNIT=UNITNAME
//OUTDD DD DSN=trgindx.CNTL,DISP=(NEW,CATLG,DELETE),
// VOL=SER=trgvol,SPACE=(TRK,(30,2,25)),UNIT=trgunit,
// DCB=(DSORG=P0,RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=holdcl
//SYSIN DD *
COPY INDD=((INDD,R)),OUTDD=OUTDD
```

Installation Job Streams

The following Unicenter TCPaccess components are on the tape:

- Unicenter TCPaccess Communications Server
- Unicenter TCPaccess Telnet Server
- Unicenter TCPaccess FTP Server

The supplied job streams to install the Unicenter TCPaccess FTP Server are as follows:

ALLOCSMP	Creates and defines the data sets necessary to set up an SMP environment.
ALLOCSHR	Creates and defines the data sets that are shared by the three products.
ALLOCFTP	Creates and defines the data sets needed to install the FTP Server.
INSTSMPR	Runs the SMPE steps necessary to receive the products and associated maintenance from the tape.
INSTSMPA	Runs the SMPE steps necessary to apply and accept the products and apply the associated maintenance.

Installation Steps for Unicenter TCPaccess FTP Server

1. Edit the symbolics, shown at the top of each JCL stream, to be consistent with the naming conventions of your site.

You can edit the data set names in the following steps manually or you can use TCPNAMES, an edit macro supplied with Unicenter TCPaccess. To use TCPNAMES, copy the TCPNAMES member to a data set listed in the SYSPROC concatenation of your TSO logon procedure. Modify the JOBCARD member for TCPNAMES to use. The LNKINDX data set is allocated as a SYS1 data set if TCPNAMES is used.

Note:

- For the link data set to be link listed, it must be catalogued in the master catalog.
- If you would like all data sets to be SMS controlled, make the following global changes:

All ALLOC jobs—'C ALL VOL=SER STORCLAS'
For ALLOCSMP—'C ALL VOLUME(STORCLAS('

Substitute the SMS storage class for all occurrences of SMPVOL, TRGVOL, DSTVOL and TLBVOL.

Verify that there is adequate space on the volume you have specified. Unicenter TCPaccess FTP Server requires 190 cylinders of DASD.

Note: For the link data set to be link listed, it must be catalogued in the master catalog.

3. Execute ALLOCSMP to allocate the data sets for the SMP/E install.

WARNING! Unicenter TCPaccess FTP Server 6.0 must be installed into a new CSI

- 4. Execute ALLOCSHR to allocate the SMP/E data sets shared by all products.
- Execute ALLOCFTP.

- 6. Execute INSTSMPR to RECEIVE products and associated maintenance.
 - SMP/E requires a six MB region to install Unicenter TCPaccess FTP Server. If you are using a tape management system such as CA1, you must modify the label parameter on your DD statements to include EXPDT=98000.

```
LABEL=(2,SL,,EXPDT=98000)
```

The INSTSMPR job as distributed includes the FMIDs for all products. There are no changes required if all products are to be installed.

Note: To selectively install one or more of the products you must modify the job to include only the desired FMIDs.

The FMIDs required for the FTP Server are as follows:

```
C2E600I
              C2E600X
C2E600S
              C196000
```

7. Execute INSTSMPA to APPLY and ACCEPT the base product and to APPLY the associated maintenance.

The following DD statement is required if the Telnet Server is installed.

```
//GSKSSL DD PATH='/usr/lib/GSKSSL.x'.
          PATHOPTS=ORDONLY
```

WARNING! The above path name is case-sensitive.

It contains IMPORT statements that are used by the Binder during the APPLY step to resolve external references to Dynamic Link Library (DLL) functions. The PATH name specified is the IBM installed one. Modify it if you have changed the name at your site.

8. Get the latest maintenance.

Apply the latest maintenance prior to beginning any customization, as configuration files or parameters may have changed.

Check for the most recent PTFs via StarTCC by using the following URL: http://support.ca.com/

Note: If there are no applicable PTFs, the installation is complete and you can skip the remaining steps.

From the left panel, select StarTCC.

If you are not registered, you **must** perform the following steps:

a. Select StarTCC Registration (required first time only).

Note: If you are registered, skip to **c**.

The registration screen appears. You must complete and submit this form to register for Total Client Care (TCC) via the Internet.

You must have your Site ID and PIN Number to complete the registration. Your Site ID and PIN Number will be associated with your new user ID. CA-TCC gives you access to additional services based on your site's licensed products.

- b. Once you fill out the information, you will be sent a confirming email notice.
- c. Once you have registered, select the path to Registered Clients Only.
- d. Enter your user ID and password on the dropdown panel.
- e. The StarTCC Solution Download main menu appears. Note the new item notification at the bottom of the screen regarding proper handling of solution downloads. This gives you detailed information of the actual download process.

Important! If you have problems with the StarTCC download process, contact Customer Support or your Customer Relationship Manager.

- Select BROWSE/DOWNLOAD SOLUTIONS.
- Select PRODUCT AND RELEASE Search type. Then select the correct product.
 - For this product, choose: NFTPSR-UNICENTER TCPACCESS FTP SERVER
 - Select Release 6.0 and press SELECT at the bottom of the panel
- h. A panel should be presented showing all of the PTFs for this release.

You can check multiple SELECT boxes, press the UPDATE STARTCC SOLUTION CART at the bottom of the screen, and then download a ZIP file containing all the PTFs you have selected.

Review the latest HOLDDATA.

To get the latest HOLDDATA, go to the StarTCC database on the Web site located at http://support.ca.com/ and download the \$\$HOLD.BIN file.

The file can be found in Solution 3, APAR QO20643, of NTCPAC - UNICENTER TCPACCESS COMMUNICATIONS SERVER, Release 6.0. Instructions for accessing the StarTCC database are included in Step 7.

This file HOLDDATA contains hold information for any PTFs that may have been PE'd.

There are two file formats:

- \$\$HOLD.VIEW (PART2 of the solution) is in ASCII format and can be viewed online
- \$\$HOLD.BIN (PART3) is in binary (EBCDIC) format and must be transferred to the mainframe in binary

10. Execute SRVPAC.

Before executing this job:

- Modify the SMPPTFIN DD statement to point to the DASD data set containing the PTFs. It must be a sequential file.
- Modify the SMPHOLD DD statement to point to the DASD data set containing the HOLDDATA. If there is no hold data, set the DD to DUMMY.

You may submit only the RECEIVE portion of this job first. This enables you to review any held PTFs, especially any with HOLD ACTION that may appear, and take appropriate action. It will also let you add additional BYPASS HOLD keywords to your APPLY statement. Unicenter TCPaccess FTP Server USERMOD

Caution: The EXECutable name FTP is not supplied as a default with this release of Unicenter TCPaccess FTP Server. FTP aliases are not supplied and you *must* use the USERMOD described next to have FTP become the EXECutable name.

UMMFTPA USERMOD

The client portion of Unicenter TCPaccess FTP Server is shipped without any aliases. The following USERMOD sample, UMMFTPA, assigns an alias of FTP (or any desired alias name) to the client and keeps it under SMP/E control for maintenance.

The sample USERMOD, distributed in trgindx.FTPSAMP (T051CUM2), creates an alias of FTP for load module T051C in the load library defined by DDDEF MFTPDDEF.

Before applying this USERMOD, you need to do the following:

- Add a DDDEF to SMP/E for the DDNAME MFTPDDEF. This DDDEF can specify the same data set as the DDDEF TCPLINK or FTPLINK. (T051C is installed into trgindx.FTPLINK)
- If you chose to specify a different data set name for MFTPDDEF, ensure that both of the following apply to the MFTPDDEF data set:
 - It is allocated and of a valid type
 - It is APF authorized

SAMPLE SMP/E JCL TO UMMFTPA USERMOD Sample

```
//T051CUM2 JOB
RECEIVE AND APPLY A USERMOD TO
//*
      CREATE AN ALIAS OF FTP
//*
//* PERFORM THE FOLLOWING GLOBAL CHANGES BEFORE RUNNING THIS JOB:
//*
//*
      1) INSURE DDDEF 'MFTPDDEF' IS DEFINED WITH VALID DATASET
//*
     2) CHANGE 'SMPINDX' TO SMPE DATASETS HIGH LEVEL QUALIFIER
//*
//SMPE
           EXEC PGM=GIMSMP, REGION=6M,
//
           PARM='CSI=SMPINDX.CSI, PROCESS=WAIT'
//SMPHOLD DD DUMMY
//SMPOUT
          DD SYSOUT=*
//SMPPTFIN DD DATA
++ USERMOD(UMMFTPA).
++ VER (Z038)
   FMID(C196000)
* USERMOD TO MAKE ALIAS OF 'FTP' FOR LOAD MODULE 'T051C'
 (OR ANY ALIAS'S YOU DESIRE) AND KEEP IT SMP/E MAINTAIN-
 ABLE FOR FUTURE MAINTENANCE PURPOSES.
* ADD A DDDEF TO SMP/E FOR DDNAME MFTPDDEF. THE DDDEF
 MAY SPECIFY THE SAME DATASET NAME AS FOR DDDEF 'TCPLINK'
 OR FOR ANY NEW OR EXISTING DATASET YOU DESIRE.
*/ .
++JCLIN.
          EXEC PGM=IEWL,
//LINK
               PARM='LIST, XREF, MAP'
//
//SYSPRINT DD SYSOUT=*
//SYSLMOD DD DISP=SHR, DSN=MFTPDDEF
//SYSLIN
          DD *
 INCLUDE
          ATCPLOAD (T051C3CP)
 INCLUDE
          ATCPLOAD(T051CUI)
 INCLUDE
          ATCPLOAD (T051CUM)
 INCLUDE
          ATCPLOAD (T051CGP)
 INCLUDE
           ATCPLOAD(ENGLISH)
 INCLUDE
           ATCPLOAD(TOOLPID)
 INCLUDE
           ATCPLOAD (T051C)
           AMODE (31), RMODE (ANY)
MODE
 SETCODE
           AC(1)
ENTRY
           CEESTART
 ALIAS
           FTP
NAME
           T051CX(R)
++MOD(T051C) LKLIB(TCPLINK).
```

```
//*
//SMPCNTL DD *
 SET BDY(GLOBAL)
 RECEIVE S(UMMFTPA) .
 SET BDY(TCPTZN) .
APPLY S(UMMFTPA) .
```

Starting Unicenter TCPaccess FTP Server

The startup member, T051RUN, is located in the FTPSAMP library. This member invokes Unicenter TCPaccess FTP Server. You have a choice to submit T051RUN as either a started task or as a batch job.

Task 1: Edit the T051RUN Member

Note: Do *not* execute TCPNAMES.

- Change the symbolic HLQ to the value you specified in member TCPNAMES.
- 2. Verify that the symbolic U=T051 is available for use. The MVS command **D SSI** displays subsystem names that have been invoked during the life of the current IPL. You can use T051 either if it does not display or if it shows as inactive. If T051 is active, you must choose a different name for your subsystem.
- 3. Verify that the character used for the symbolic SRC is not in use. If a character is to be used, modify the parameter to include that character; for example, SRC=%.'
- 4. If you have a line limit, add one of the following lines immediately after the JOBCARD to support diagnostics.
 - If you are using JES2 add: /*JOBPARM LINES=9999
 - If you are using JES3, add: //*MAIN LINES=(999,W)
- 5. Update the JOB statement for T051RUN.

- 6. To prepare T051RUN as a started task:
 - Delete the T051RUN JOBCARD and comments that appear prior to the PROC statement.
 - Delete the following two JCL statements from T051RUN:

```
// PEND
//RUNT051 EXEC T051
```

■ Copy member T051RUN into a system PROCLIB.

Task 2: Submit T051RUN

- To submit T051RUN as a batch job, submit member T051RUN.
- To submit T051RUN as a started task, issue the MVS command **S** T051RUN.
- To stop T051RUN, issue the MVS command F T051RUN, P CLEAR and answer YES to the reply. This reply is generated if you have the PROMPT parameter specified in your T051CFI0 member.

Chapter

5

Diagnosis and Problem Reporting

Generally, Customer Support needs the following documentation to help diagnose problems thoroughly:

- SVC dump of the Unicenter TCPaccess FTP Server and other related address spaces
- JCL output of the Unicenter TCPaccess FTP Server job
- Case record from Customer Support

Refer to the *System Management Guide* for a complete description of diagnostic tools.

Obtaining a SVC Dump

Read the IBM document *MVS/ESA System Commands Reference Summary* for the syntax of the required DUMP commands. In particular, include all jobs involved in the problem using the JOBNAME parameter of the DUMP command.

Obtaining JCL Output

Copy the JCL output of TO51RUN to a file using the following procedure:

- If you are using JES2/SDSF, type **XDC** next to the job listed in SDSF and follow the panel instructions. This will let you copy to a data set of your choice. Generally, for every thousand lines of job output you need three 3390 tracks.
- If you are using JES3, you may use FLASHER or a similar product to copy the RUNTCP output to a data set in a similar fashion.

Appendix

Installation Data Sets

The following is a list of installation tape data sets.

File Number	Data Set Name
1	INSTLJCL
2	SMPMCS
3	C196000.F1
4	C196000.F2
5	C196000.F3
6	C196000.F4
7	C2C6000.F1
8	C2C6000.F2
9	C2C6000.F3
10	C2C6000.F4
11	C2E600C.F1
12	C2E600C.F2
13	C2E600I.F1
14	C2E600I.F2
15	C2E600I.F3
16	C2E600I.F4
17	C2E600S.F1

File Number	Data Set Name
18	C2E600S.F2
19	C2E600S.F3
20	C2E600S.F4
21	C2E600S.F5
22	C2E600T.F1
23	C2E600T.F2
24	C2E600T.F3
25	C2E600T.F4
26	C2E600X.F1
27	C2E600X.F2
28	C2E600X.F3
29	C2E600X.F4
30	C2E6000.F1
31	C2E6000.F2
32	C2E6000.F3
33	C2E6000.F4
34	C2E6000.F5
35	C2E6000.F6
36	C2E6000.F7
37	C2E6000.F8
38	C2E6000.F9
39	C2E6000.F10
40	C2E6000.F11
41	C2E6000.F12
42	C2E6000.F13
· ·	·

File Number	Data Set Name
43	C2E6000.F14
44	C2E6000.F15
45	C2F1000.F1
46	C2F1000.F2
47	C2F1000.F3
48	C2F1000.F4
49	C2F1000.F5
50	SMPPTFIN

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